

Name _____

Date _____

Advanced Algebra

Unit 6: Advanced Systems Assignment #3

Matrix Multiplication and solving systems of equations with elimination

Learning Target: I can “undo” a matrix using matrix multiplication and then solving systems of equations using elimination.

$$1) \begin{bmatrix} 3 & 2 \\ 1 & 5 \end{bmatrix} * \begin{bmatrix} a & b \\ c & d \end{bmatrix} = \begin{bmatrix} 7 & 18 \\ 21 & 32 \end{bmatrix}$$

$$2) \begin{bmatrix} 2 & 6 \\ 1 & 4 \end{bmatrix} * \begin{bmatrix} a & b \\ c & d \end{bmatrix} = \begin{bmatrix} 18 & 28 \\ 12 & 18 \end{bmatrix}$$

$$3) \begin{bmatrix} 6 & 2 \\ 1 & 3 \end{bmatrix} * \begin{bmatrix} a & b \\ c & d \end{bmatrix} = \begin{bmatrix} -18 & 32 \\ -11 & 10 \end{bmatrix}$$

$$4) \begin{bmatrix} 2 & 6 \\ 4 & 1 \end{bmatrix} * \begin{bmatrix} a & b \\ c & d \end{bmatrix} = \begin{bmatrix} 22 & 16 \\ 22 & 21 \end{bmatrix}$$